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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,468	09/09/1999	MARC A. SMITH	1026-019/MMM	1203

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EXAMINER	
SHAH, SANJIV	
ART UNIT	**PAPER NUMBER**
2176	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/392,468	SMITH ET AL.	
	Examiner	Art Unit	
	Almari Yuan	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) *42-55* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment filed 3/03/05.

2. The rejection of claims 1-22 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter has been withdrawn as necessitated by amendment.

3. Claims 42-55 are withdrawn. Claims 1-41 are pending in the case for examination. Claims 1, 23, 43, and 50 are independent claims.

Election/Restrictions

4. Applicant's election with traverse of claims 43-55 in the reply filed on 3/03/05 is acknowledged. The traversal is on the ground(s) that originally filed claims 1-42, drawn to visualization of threaded information entries, classified in class 715, subclass 526 is independent or distinct from newly presented claims 43-55, which are drawn to associating messages with identifiers, classified in class 345, subclasses 751 and 752. This is not found persuasive because the Examiner still believes that the originally filed claimed invention of claims 1-42 is distinct from newly added claims 43-55 which is drawn to another invention for creating and providing message representation by associating messages with identifiers to identify relationships between messages. Therefore, the requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-3, 7-12, 14-26, 30-35, and 37-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lokuge (USPN 6,252,597 B1 - filed on 2/1997) in view of Rao et al. (USPN 6,085,202 - filed on 3/1998).**

Regarding independent claim 1, Lokuge discloses:

A method for presenting threaded information entries as graphical representation of the threaded information rendered on a display interface (on col. 2, line 6 – col. 3, line 14: teaches plurality of entries in a tree structure), method comprising:

providing an indented threading arrangement on the display interface (on col. 6, lines 8-15 and col. 11, lines 5-43: teaches indentation of categories (entries) in a hierarchical arrangement (see figures 15 and 16) and on col. 5, lines 23-25 teaches GUI).

However, Lokuge does not explicitly disclose, "substantially linear-shaped graphical representation of the threaded information entries".

Rao on col. 16, lines 33-37 and col. 17, lines 46-54, see figures 14 and 15: teaches one-dimensional array or row (entry lines).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide one-dimensional rows in a hierarchical arrangement on a graphical display, as taught by Rao, incorporated into the hierarchical arrangement of indented categories (entries), as taught by Lokuge, in order to permit the user to quickly and efficiently specify and locate information of particular interest.

Regarding dependent claims 2 and 25, Rao discloses:

in which the threaded information entries include plural fields of entry information and in which the entry lines are rendered with variations corresponding to information in one or more of the predefined fields of entry information (on col. 12, line 50 – col. 13, line 5: teaches mapping entries with cell regions).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide a way to map (associate) entries with a plurality of cell regions (fields), as taught by Rao, incorporated into the system of Lokuge, in order to enhance the display of images directly representing an item of data in the data structure.

Regarding dependent claims 3 and 26, Lokuge discloses:

in which individual entry lines are rendered with colors corresponding to information in one or more of the predefined fields of the entry information for the individual threaded information entries (Lokuge on col. 7, lines 35-48: teaches colors corresponding to categories).

Regarding dependent claims 7, 9, 30, and 32, Lokuge discloses:

in which the entry lines are rendered with lengths corresponding to information in one or more of the predefined fields of entry information (on col. 8, lines 26-34: teaches text or symbols showing in the expansive locations may be resized).

Regarding dependent claims 8, 11, 12, 31, and 34, Lokuge discloses:

in which the entry lines are rendered at positions corresponding to information in one or more of the predefined fields of entry information (on col. 11, lines 5-43: teaches providing a range of indentation to position displayed information objects).

Regarding dependent claims 10 and 33, Lokuge discloses:

in which each information entry includes an amount of information and in which the one or more predefined fields of entry information relates to the amount of information in the information entry (on col. 6, lines 33-52: teaches resizing defined region to permit user to view all the information in that region).

Regarding dependent claims 14, 21, 39, and 41, Lokuge discloses:

in which the threaded information includes threads that begin with top-level information entries, the graphical representation further comprising text information only about top-level information entries (Lokuge on col. 6, lines 8-15: teaches top tier categories (entries).

Regarding dependent claims 15 and 37, Lokuge discloses:

in which the entry lines are horizontal (on col. 6, lines 8-15: teaches horizontal dimensions (entry lines)).

Regarding dependent claims 16 and 38, Lokuge discloses:

in which the entry lines are arranged vertically (on col. 6, lines 8-15: teaches vertical dimensions).

Regarding dependent claim 17, Lokuge discloses:

in which the threaded information includes threads that begin with top-level information entries and in which the entry indicators representing the top-level information entries include spacing between them (on col. 5, lines 53-57: teaches create space within a list of information).

Regarding dependent claims 18 and 19, Rao discloses:

in which plural ones of the entry indicators are positioned together to represent a thread of threaded information and in which the entry indicators representing the thread include no spacing

between them transverse to their one dimension (on col. 21, lines 1-24 and col. 26, lines 8-36, see figures 14 and 15: teaches zero spacing (no spacing) for entries as the amount of space).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide zero spacing of each entry for user to select a focal region of cells, as taught by Rao, incorporated into the system of Lokuge, to effectively view selected regions of interest.

Regarding dependent claims 20 and 40, Rao discloses:

in which the entry lines associated with the information entries of a user-selected thread are replaced with enlarged entry bars (on col. 14, lines 47-67: teaches replacing character information with graphical display object as different types of bars 30, 32, 36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide a way to replace character information (entries) with graphical display objects as different types of bars, as taught by Rao, incorporated into the system of Lokuge, in order to enhance the display of each character information within a cell.

Regarding dependent claims 22 and 42, Rao discloses:

in which user-selected enlarged entry bars are distinguished from other enlarged entry bars (on col. 14, lines 47-67: teaches different types of bars 30, 32, 36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide a way to replace character information (entries) with graphical display objects as different types of bars, as taught by Rao, incorporated

into the system of Lokuge, in order to enhance the display of each character information within a cell.

Regarding independent claim 23, Lokuge discloses:

At least one computer readable medium having instructions stored thereon, which when executed by at least one processing system, cause the processing system to implement threaded information visualization software providing a visualization of threaded information that includes plural threaded information entries (on col. 2, line 6 – col. 3, line 14: teaches plurality of entries in a tree structure), the at least one medium comprising:

a rendering engine instructions for rendering a threaded information visualization as indented threading arrangement (on col. 6, lines 8-15 and col. 11, lines 5-43: teaches indentation of categories (entries) in a hierarchical arrangement).

However, Lokuge does not explicitly disclose, "substantially linear-shaped graphical representation of the threaded information entries".

Rao on col. 16, lines 33-37 and col. 17, lines 46-54, see figures 14 and 15: teaches one-dimensional array or row (entry lines).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide one-dimensional rows in a hierarchical arrangement on a graphical display, as taught by Rao, incorporated into the hierarchical arrangement of indented categories (entries), as taught by Lokuge, in order to permit the user to quickly and efficiently specify and locate information of particular interest.

Regarding dependent claim 24, Lokuge discloses:

further comprising user interface controls for allowing user to select form among plural visualization formats (Lokuge on col. 3, lines 40-67: teaches formats) that each include an indented threading arrangement of parallel (Lokuge on col. 6, lines 8-15 and col. 11, lines 5-43: teaches indentation of categories (entries) in a hierarchical arrangement; categories can be arranged in parallel structure (see figures 15 and 16)), generally one-dimensional entry lines (Rao on col. 16, lines 33-37 and col. 17, lines 46-54, see figures 14 and 15: teaches one-dimensional array or row (entry lines)).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide one-dimensional rows in a hierarchical arrangement on a graphical display, as taught by Rao, incorporated into the hierarchical arrangement of indented categories (entries), as taught by Lokuge, in order to permit the user to quickly and efficiently specify and locate information of particular interest.

Regarding dependent claim 35, Rao discloses:

in which the entry lines are rendered at lateral positions corresponding to information in one or more of the predefined fields of entry information (on col. 10, lines 35-37: teaches data array is a combination of data items mapped into an array).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Rao into Lokuge to provide a way to map data items into a data array, as taught by Rao, incorporated into the system of Lokuge, in order to enhance the display of images directly representing an item of data in the data structure.

7. **Claims 4-6, 13, 27-29, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lokuge-Rao as applied to claims 1-3, 7-12, 14-26, 30-35, and 37-42 above, and further in view of Durham et al. (USPN 5,832,502 – filed on 7/1996).**

Regarding dependent claims 4 and 27, Lokuge and Rao discloses the invention substantially as claimed as described *supra*. However, Lokuge and Rao do not explicitly disclose, "in which each information entry has an originator and in which the one or more predefined fields of entry information relate to the originator of the information entry and the originator is indicated in the entry line for the information entry".

Durham et al. (Durham on col. 6, lines 13-34, see figure 3D: teaches displayed a number of child blocks (fields) with messages and users name (originator) of the messages.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Durham into Lokuge and Rao to provide a display of a number of child blocks (fields) occupied with messages and user names of the messages, as taught by Durham, incorporated into the systems of Lokuge and Rao, in order to indicate the depth of the conversation, resulting in the desired visual display.

Regarding dependent claims 5 and 28, Lokuge discloses:

in which plural information entries may share a common originator (Durham on col. 6, lines 13-34, see figure 3D: teaches displayed a number of child blocks (fields) with messages and which may be common users name (originator) of the messages) and in which the color of an entry line corresponds to the number of information entries provided by the originator of the entry line (Lokuge on col. 7, lines 35-48: teaches color corresponding to categories).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Durham into Lokuge and Rao to provide a display of a number of child blocks (fields) occupied with messages and user names of the messages, as taught by Durham, incorporated into the systems of Lokuge and Rao, in order to indicate the depth of the conversation, resulting in the desired visual display.

Regarding dependent claims 6, 13, 29, and 36, Durham discloses:

in which each information entry has an associated time and in which the one or more predefined fields of entry information relate to the associated time of the information entry and the associated time is indicated by positioning of the entry line for the information entry (Durham on col. 6, lines 13-34, see figure 3D: teaches items proportional to number of child blocks in the conversation index; displaying the time messages were created).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified Durham into Lokuge and Rao to provide a display of a number of child blocks (fields) occupied with messages and user names of the messages, as taught by Durham, incorporated into the systems of Lokuge and Rao, in order to indicate the depth of the conversation, resulting in the desired visual display.

Response to Arguments

8. Applicant's arguments filed on 3/03/05 have been fully considered but they are not persuasive.

Regarding Applicant's remarks on pages 19-23:

Applicant continuously argues that the references does not teach "one-dimensional entry lines that each represent one of the threaded information entries", however, this argument is moot because Applicant has removed this limitation from the claimed language. The Examiner has maintained Rao to teach the newly amended limitation "substantially linear-shaped graphical representation of the threaded information entries", on col. 16, lines 33-37 and col. 17, lines 46-54, see figures 14 and 15: teaches one-dimensional array or row (entry lines), in other words, linear-shaped graphical representation is the same as one-dimensional array as shown in Figures 14 and 15 in Rao.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almari Yuan whose telephone number is 571-272-4104. The examiner can normally be reached on Mondays - Fridays (8:30am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

AY
May 26, 2005